Russian, Spanish, and all other foreigners except the Canadians, to enjoy all the privileges of our patent system (exceptin cases of designs) on the above terms.

During the last sixteen years, the business of procuring Patents for new inventions in the United States and all foreign countries has been conducted by Messrs. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN; and as an evidence of the confidence reposed in our Agency by the Inventors throughout the country, we would state that we have acted as agents for more than FIFTEEN THOUSAND Inventors! In fact, the publishers of this paper have become identified with the whole brotherhood of Inventors and Patentees at home and abroad. Thousands of Inventors for whom we have taken out Patents have addressed to us most flattering testimonials for the services we have rendered them, and the wealth which has inured to the Inventors whose Patents were secured through this Office, and afterward illustrated in the SCIENTIFIC AMERICAN, would amount to many millions of dollars! We would state that we never had a more efficient corps of Draughtsmen and Specification Writers than are employed at present in our extensive Offices, and we are prepared to attend to Patent business of all kinds in the quickest time and on the most liberal terms.

The Examination of Inventions.

Persons having conceived an idea which they think may be patentable, are advised to make a sketch or model of their invention, and submitit to us, with a full description, for advice. The points of novelty are carefully examined, and a reply written corresponding with the facts, free of charge. Address MUNN & CO., No. 37 Park-row, New York.

Preliminary Examinations at the Patent Office.

The advice we render gratuitously upon examining an invention does not extend to a search at the Patent Office, to see if a like invention has been presented there, but is an opinion based upon what knowledge we may acquire of a similar invention from the records in our Home Office. But for a fee of $5, accompanied with a model or drawing and description, we have a special search made at the United States Patent Office, and a report setting forth the prospects of obtaining a Patent &c., made up and mailed to the Inventor, with a pamphlet, giving instructions for further proceedings. These preliminary examinations are made through our Branch Office, corner of F and Seventh-streets, Washington, by experienced and competent persons. More than 5,000 such examinations have been made through this office during the past three years. Address MUNN & CO., No. 37 Park-row, N. Y.

How to Make an Application for a Patent.

Everyapplicantfor a Patent must furnish a model of his invention. If susceptible of one; or if the invention is a chemical production, he must furnish samples of the ingredients of which his composition consists, for the Patent Office. These should be securely packed, the inventor's name marked on them, and sent, with the government fees by express. The express charge should be prepaid. Small models from a distance can often be sent cheaper by mail. The safest way to remit money is by draft on New York, payable to the order of Munn & Co. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents; but, if uot convenient to do so, there is but little risk in sending bank bills by mail, having the letterregistered by the postmaster. Address MUNN & Co No. 37 Park-row, New York.

Rejeeted Applications.

We areprepared to undertake the investigation and prosecution of rejected cases, on reasonable terms. The close proximity of our Washington Agency to the Patent Office affords us rare opportunities for the examination and comparison of references, models, drawings, documents, &c. Our success in the prosecution of rejected cases has been very great. The principal portion of our charge is generally left dependent upon the final result.

All persons having rejected cases which they desire to have prosecuted are invited to correspond with us on the subject, giving a brief history of the case, inclosing the official letters, &c.

Caveats.

Persons desiring to file a Caveat can have the papers prepared in the shortest time by sending a sketch and description of the invention. The government fee for a Caveat, under the new law, is $10. A pamphletof adviceregarding applications for Patents and Caveats, in English and German, furnished gratis on application by mail. Address MUNN & CO., No. 37 Park-row, New York.

Foreign Patents.

We are very extensively engaged in the preparation and securing of Patents in the various European countries. For the transaction of this business, we have offices at Nos. 66 Chancery-lane, London; 29 Boulevard St. Martin, Paris; and 26 Rue des Eperonniers, Brussels. We think we can safely say that THREE-FOURTHS of all the European Patents secured to American citizens are procured through our Agency.

Inventors will do well to bear in mind that the English law does not limit the issue of Patents to Inventors. Any one can take out a Patent there.

Circulars of information concerning the proper course to be pursued in obtaining Patents in foreign countries through our Agency, the requirements of different Patent Offices, &c., may be had gratis upon application at our principal office, No. 37 Park-row, New York, or either of our Branch Offices.

Assignments of Patents.

The assignment of Patents, and agreements between Patentees and manufacturers, carefully prepared and placed upon the records at the Patent Office. Address MUNN & CO., at the Scientific American Patent Agency, No. 37 Park-row, New York.

It wouldrequire many columns to detail all the ways in which the Inventor or Patentee may be served at our offices. We cordially invite all who have anything to do with Patent property or inventions to call at our extensive offices, No. 37 Park-row, New York, where any questions regarding the rights of Patentees, will be cheerfully answered.

Communications and remittances by mail, and models by express (prepaid), should be addressed to MUNN & CO., No. 37 Park-row, New York.

TO OUR READERS.

Models are required to accompany applications for Patents under the new law, the same as formerly, except on Design Patents, when two good drawings are all that is required to accompany the petition, specification and oath, except the government fee.

INVARIABLE RULE.—It is an established rule of this office to stop sending the paper w n he time for which t was pre-paid has expired.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and inclosing $1 as fee for copying. We can also furnish a sketch of any patented machine issued since 1853, to accompany the claim, on receipt of $2. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

RECEIPTS.—When money is paid at the office for subscriptions, a receipt for it will always be given; but when subscribers remit their money by mail, they may consider the arrival of the first paper a *bona fide* acknowledgment of our reception of their funds.

NEW PAMPHLETS IN GERMAN.—We have just issued a revised edition of our pamphlet of *Instructions to Inventors*, containing a digest of the fees required under the new Patent Law, &c., printed in the German language, which persons can have gratis upon application at this office. Address MUNN & CO.,
No. 37 Park-row, New York.

Notes and Queries

R. T. C., of D. C.—Your proposition does not seem to meet the case of a patentee, who had inadvertently made a wrong oath at the time he filed his application into the Patent Office. We believe it is perfectly competent to correct such an error by re-issue the practice would be both sensible, and just, and but for the opinion of some crochety judge would have been the established policy of the office.

G. C. Jr., of Conn.—By reference to page 279, Vol. V. SCIENTIFIC AMERICAN, you will find an article upon the use of a patented invention which fully answers your inquiry.

W. R., of Ohio.—The recoil of a gun is produced by the pressure of the gases. The burning of gun powder changes a portion of its elements from the solid to the gaseous state, by which their volume is increased some 300 fold. In expanding, these gases exert a pressure in every direction, driving the ball forward and the gun back with the same force. Capt. Rodman devised a delicate apparatus for measuring the recoil of the gun while the shot was passing along the bore on its way out, and thence by calculations based on the relative weight of the gun and the shot, he was able to ascertain the velocityof the shot during each portion of its passage out.

C. S. F., of N. Y.—Your spring door knob made flush with the face of the door and operated by pushing it in would be an improvement, as the projecting knobs are liable to catch the loose dresses of females and the coat pockets of males. Several steam carriages for family use have been made and used. You will find an illustration of one on page 1, Vol. III. (new series) SCIENTIFIC AMERICAN.

B. A. H., of Iowa.—Calcination produces no chemical change in sand composed of silica. The "shore sand" to which you refer may contain oxide of iron and other substances capable of being decomposed by calcination in an open furnace. You can easily determine the question by an experiment.

H. L., of Mass.—Sweet oil is made from the fruit of the olive, but much oil sold under this name is made from lard. Opium is obtained by wounding the unripe seed capsules of the poppy and collecting the milky juice which exudes from the wound then allowing it to dry in the sun after which it is kneaded into cakes.

J. J. H., of Ky.—Bronzing on metal is produced by powders applied with varnishes. We are not acquainted with any other method of bronzing than by using bronze powders, which can be obtained in nearly all stores where painter's materials are sold.

J. T., of Eng.—We are not acquainted with any original works on fishing by American authors. The good old Isaac Walton is our authority still on this interesting question.

J. B. M., of Ohio.—The question of preserving stone is likely soon to be one of much interest in this city. If you have a reliable article for preserving it, you had better advertise it in the leading city papers. We do not know of any surer way of getting it before the public.

O. A. P., of N. Y.—In No. 5, Vol. XIV. (old series) you will find a diagram and description how to lay out a grain hopper.

H. W. L., of Boston.—We believe that several coats of good linseed oil is the best application you can use for protecting the surface of your artificial stone from absorbing moisture. Any stone, however, which absorbs moisture and freezes in cold weather is unfit for building purposes, because the frost splits it off in scales from the surface.

G. C., of Ohio.—No patent can be obtained in Canada, for an article which has been patented in Great Britain or the United States. The Canadian patent law is very injurious to the interests of the Province, it prevents the introduction of a great number of useful manufactures which would be of great benefit to that country.

J. W. C., of Wis.—Ure's "Dictionary of Arts and Sciences," contains all the published information known to us respecting the manufacture, bleaching and sizing of paper.

J. W. C., of Conn.—A pendulum vibrating on a perfectly frictionless axis and where it would not meet resistance from the air, &c., would oscilate for ever. You cannot, however, obtain a frictionless axis because the friction is just in proportion to the weight of the pendulum.

W. L. W., of N. B.—About the cheapest paint which you can use for a steam boiler, which is intended to stand without use for three months in winter, is a mixture of linseed oil, black lead and some turpentine. A thin coat of coal tar, oil and a little black lead will also answer well. Any paint will burn off when the boiler is again fired up for use. In the use of salt water for steam boilers, no chemicals could be economically employed to prevent saturation of the brine and a deposit of salt.

R. V. J., of Pa.—The adaptation of a well known vegetable substance, as a substitute for coffee is not patentable. A combination of various kinds of vegetables for that purpose might be patented.

P. D. F., of Pa.—Many ways have been proposed for fitting the breech of a breech-loading cannon to make it gas tight. The commonest forms of the breech, have been the slide, the screw and the faucet. In the celeorated Armstrong gun a combination of slide and screw is used, that is said to be perfectly gas tight.

W. F. J., of Del.—If the moon were resting upon the earth would not the two globes be pressed together at the point of contact with great force? The same is the case with the two halves of the earth, and there can be no hollow in the middle. The centrifugal force near the centre of the earth is exceedingly feeble, and at the surface it is just sufficient to raise water 13 miles.

S. L., of Iowa.—Rodman's cannons are all cooled in the manner you propose, namely, by a stream of cold water passed through their interior. You will find a description of the method of cooling, and experiments testing the strength of such guns on page 261, Vol. XI. (old series) SCIENTIFIC AMERICAN. You will also find an illustration of a wrought iron cannon formed in rings bolted together (such as you suggest) on page 220. Vol. II. (old series) SCIENTIFIC AMERICAN. DeBrame's cannon is loaded with a revolving chambered breech. See page 385, Vol. IV. (present series) SCIENTIFIC AMERICAN. We do not discover any patentable novelty in your marking tool.

O. F. D. & Co.—Giffard's injector is manufactured in Philadelphia by Messrs. Sellers.

P. S., of C. W.—The Sibley army tent is manufactured by J. H. Landell, Newark, N. J. Holtzapffel's work on turning and mechanical manipulation can be procured in this city, price $15. We are glad to know that you have taken our paper so long. We hope you may be able to extend its circulation amongst your friends.

A. P., of N. Y.—You will obtain all the information you desire respecting the grinding, &c., of lenses in Dick's "Practical Astronomer." With it and Brewster's Optics, you may be able to make such lenses as you require. A receipt cannot instruct you how to set jewels in chronometers. You must go and learn the art with a practical man. A hard solder for gold is composed of 13 grains of gold. 7 of pure copper and 4 of pure silver. Melt altogether and roll it out thin for use.

T. W., of Ohio.—To make a good black varnish for iron work, take 8 lbs. of asphaltum and fuse it in an iron kettle, then add 2 gallons of boiled linseed oil, 1 lb. of litharge, one-half pound of sulphate of zinc, (add these slowly or it will fume over,) and boil them for about three hours. Now add 1½ lbs. of dark gum amber, and boil for two hours longer, or until the mass becomes quite thickwhencool. After this it should be thinned with turpentine to the proper consistency.

E. P. P., of N. J.—"The Engineers and Mechanic's Dictionary," was published some years ago by Messrs. D. Appleton & Co. booksellers of this city.

J., of Wis.—Pure clay is a silicate of alumina, composed of silica and alumina. If a substance not soluble in water, is dissolved in a mixture of acid and water, and then an alkali is added which will combine with the acid, the substance dissolved will return to its solid condition and fall to the bottom of the water. This process is called precipitating, and when ammonia is the alkali used the precipitating is said to be done by ammonia. Any process which causes a substance in solution to take the solid form is called precipitating.

H. W. B., of N. Y.—Your questions in relation to tugs do not state all the conditions necessary for an answer.

A. P. W., of Pa.—We cannot answer your inquiries about Pott's projectile. You had better correspond with him on the subject.

T. McM., of N. Y.—Wells's geology is a good elementary work. You can get it of Ballfere Brothers, 440 Broadway, N. Y. An advertisement in the SCIENTIFIC AMERICAN, would doubtless procure for you the kind of miner that you want.

Money Received

At the Scientific American Office on account of Patent Office business, during one week preceding Wednesday, Feb. 12, 1862:—

L. B., of Conn., $20; H. H. W., of N. Y., $45; R. and P., of Pa., $20; W. J. P., of N. Y., $45; H. and B., of France, $20; E. B. McC., of Conn., $20; S. and B., of Wis., $45; D. S., of N. Y., $70; G. H., of N. Y., $30; W. H. C., of Mich., $25; A. O. C., of N. J., $15; J. L., of Mass., $12; P. H., of N. Y., $15; J. G., of Pa., $500; W. B. B., of Ill., $15; S. H. M., of O., $25; H. J., of Conn., $22; L. G., of N. Y., $10: W. H. D., of N. Y., $15; D. and K., of Mass., $25; J. D. W., of N. Y., $15; A. D., of N. Y., $25; J. F. L., of N. Y., $25; G. B. O., of N. Y., $25; J. N. H., of N. Y., $45; R. and P., of Pa., $20; J. L. T., of N. Y., $20; B. and C., of Mich., $20; W. H. Van G., of N. J., $45; J. C., of Conn., $20; C. G., of Mass., $20; E. D. W., of Pa., $40; E. S., of N. Y., $15; E. C., of Mass., $25; J. F. L., of N. Y., $40; J. K. Z., of Ind., $15; J. D., of Ill., $10; D. C. D., of Ind., $15; L. W. P., of Mass., $15; T. C., of R. I., $45; E. C., of Ky., $25; C. P. B., of Conn., $25; McK., and F., of N. Y., $25; S. H., of Ind., $15; C. H. B., of Mass., $15; A. H., of Mass., $15; L. K., of N. Y., $25; G. T., of N. Y., $25; A. W., of Pa., $45; W. H. H., of N. J., $45; A. B. H., of Conn., $20; H. and S., of N. Y., $40; E. M. J., of Conn., $20; W. M. M., of Ill., $45; D. O. F., of Mass., $20; W. W. G., of Me., $15; D. J. M., of O., $25; D. S., of N. Y., $10; J. N., of Ind., $25; J. K., of N. Y., $40; D. and H., of N. Y., $15; C. C., of Ill., $15; A. N. P., of Ill., $15; G. F. H., of Ill., $25; B. F. C., of N. Y., $15; F. C. F., of Mass., $15; F. and G., of Conn., $100; W. and P., of O., $25; R. J. S., of N. Y., $10; E. M., of Conn., $25; D. M., of N. Y., $50; C. W. I., of N. Y., $25.

Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Office from Feb. 5, to Wednesday Feb. 12 1862:—

H. & S., of N. Y.; D. S., of N. Y.; A. D., of N. Y; S. A. M., of N. Y.; D. J. M., of O.; J. N., of Ind.; R. K., of Ill.; D. M., of N. Y.; (2 cases.) C. E. L. H., of Conn.; W. H. C., of Mich.; J. L., of Mass.; J. F. L., of N. Y.; E. D. W., of Pa.; E. C., of Mass.; W. & P., of O.; D. & K., of Mass.; S. H. M., of O; C. W. I., of N. Y.; G. B. O.; of N. Y.; G. F. H., of Ill.; E. C., of Ky.; B. B., of O.; G. T., of N. Y.; C. P. B., of Conn.; J. K., of N. Y.; McK. & F., of N. Y.

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Twenty-five Cents per line for each and every insertion, payable in advance. To enable all to understand how to compute the amount they must send in when they wish advertisements inserted, we will explain that ten words average one line. Engravings will not be admitted into our advertising columns; and, as heretofore, the publishers reserve to themselves the right to reject any advertisement they may deem objectionable.

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No charge is made for the publication, and the cuts are furnished to the party for whom they are executed as soon as they have been used. We wish it understood, however, that no secondhand or poor engravings, such as patentees often get executed by inexperienced artists for printing circulars and handbills from, can be admitted into these pages. We also reserve the right to accept or reject such subjects as are presented for publication. And it is not our desire to receive orders for engraving and publishing any but good Inventions or Machines, and such as do not meet our approbation in this respect, we shall decline to publish.

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Having always maintained the duty of good citizens in all parts of the land to stand by the Constitution, in its spirit and letter, when that Constitution was assailed and its overthrow attempted, we accordingly at once gave a cordial support to the Government in its patriotic endeavor to assert its lawful authority over the whole land. Believing secession to be rebellion, and when attempted, as in this case, without adequate reasons, to be the highest crime, we hold

1. That the war was forced upon us by the unjustifiable rebellion of the seceding States.

2. That the Government, as the ordinance of God, must put down rebellion and uphold the Constitution in its integrity.

3. That every citizen is bound to support the Government under which he lives, in the struggle to reëstablish its authority over the whole country.

4. That the Constitution of the United States is the supreme law of the Government as well as of the people; that the war should be prosecuted solely to uphold the Constitution and in strict subordination to its provisions: and the war should be arrested, and peace concluded, just so soon as the people now in revolt will lay down their arms and submit to the Constitution and laws of the land.

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